

MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

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Ronald Reagan Building  
International Trade Center  
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**Thursday, March 20, 2003**

**9:17 a.m.**

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair  
ROBERT D. REISCHAUER, Ph.D., Vice Chair  
SHEILA D. BURKE  
AUTRY O.V. "PETE" DeBUSK  
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JOSEPH P. NEWHOUSE, Ph.D.  
CAROL RAPHAEL  
ALICE ROSENBLATT  
JOHN W. ROWE, M.D.  
DAVID A. SMITH  
RAY A. STOWERS, D.O.  
MARY K. WAKEFIELD, Ph.D.  
NICHOLAS J. WOLTER, M.D.

**AGENDA ITEM:**

Variation in per capita Medicare expenditures  
-- David Glass

MR. HACKBARTH: Good morning. First on our agenda today is a discussion of variation in per capita Medicare expenditures.

David, would you lead the way for us please?

MR. GLASS: Thank you. Our theme today or at least this morning is variation. We're going to return to the question of geographic variation and Medicare expenditures. These are some preliminary results and we're hoping to put together a June chapter on the subject. This is kind of Variation 101. We're going to start from the beginning. A lot of people, Wennberg and Associates up at Dartmouth they're looking at more subtle things. They're looking at variation in service use by smaller areas. But we're starting right at the beginning because these are the kind of questions we've had to answer. We'll get to the other eventually we hope.

So the question we've had to answer is concern over variation in Medicare expenditures, particularly per capita Medicare expenditures among states. So we're at the state level. There is large variation and it raises concerns. People are worried that it means that the program is inequitable.

A lot of the problem though has to do with the use of incorrect measures of per capita expenditures. We've gone over this in the past and it's in your handout. Basically, the problem is they were using -- what's often used is a number that's essentially the provider payments in a state divided by the number of beneficiaries who live in the state. That gets you into trouble in states where you have either large in-migration or out-migration for services. Like Washington, D.C., for example, has a lot of providers and hospitals and gets a lot of beneficiaries coming in from Maryland and Virginia. So when you divide all the services provided in D.C. by the number of D.C. beneficiaries you get a high number, which is also an incorrect number.

So we've started what we think is a better measure and it starts with the amounts that CMS calculates is fee-for-service expenditures by county. We focus of the fee-for-service expenditures rather than fee-for-service plus, for instance, M+C expenditures. That's because we're trying to understand what's really going on in these geographic areas, and the M+C payments, as you know, have a lot of policy in them as well so are somewhat arbitrary. So we've look at fee-for-service expenditures by county to start with and then rolled it up to the state level. This is consistent with the Commission's position on what M+C payments should be, for example. That they should be the same as the fee-for-service in that area, risk adjusted, of course.

Now conceptually there's two sources of variation. There's the cost and the quantity of services. Principally in the cost we're going to look at input prices, the cost of doing business in an area. We feel that should be adjusted out, if you will,

because that's a major source of variation. Then another one is the mix of providers. By this we mean that different areas, different states have different mixes of, for example, hospitals. Some have lots of teaching hospitals, some have very few. Because payments are made differently to some of these places you need to think about that. Also, some places have a different mix of other kinds of providers like long-term care hospitals as opposed to SNFs, and you also would like to think about how you might be able to adjust for that to get an equal -- an understanding of what's being provided.

Now quantity, one of the principal things that determines how much health care someone seeks out and receives is their health status. If you're really sick and you have to go to the hospital, obviously you're going to require a lot more health service than someone who is well. So we want to be able to take that into account. Also there are some other beneficiary characteristics which people have said affect service use, such as how much supplemental insurance you have, for instance, income, other characteristics. Then there's, of course, practice pattern variation which is what a lot of people have looked at in some depth and we're just going to get to that here in this presentation. But that's another possible source of differences in the quantity of health care provided in an area.

The question here, of course, is should the differences be of concern or are they simply reflecting differences in the cost of doing business, beneficiary characteristics, and physician behavior? The differences in expenditures I'm talking about. So is that a concern or is that just the way things are?

So the way we started this is to sort the states by their per capita fee-for-service expenditures. So we figure out what range each state falls in here and then, in this case we're weight it by the beneficiaries who live in the state. The reason is that we're looking at beneficiary per capita expenditures so we need to weight the state population in here so we're treating all beneficiaries equally. If you didn't do this you'd end up with beneficiaries in states with small populations counting for more than a beneficiary in a state with a large population. So we have beneficiary weighted this so the height of these bars is the percent of beneficiary-weighted states in each of those dollar categories of per capita fee-for-service expenditures.

The thing to note about this is it's kind of bell-shaped and it's pretty spread out. If you want to measure things you could say that the three central bars have about 60 percent of the distribution in them. In Table 1 in the handouts we also have things like standard deviation and that kind of measure in there. \$740 is the standard deviation in this, and the average is about \$5,400.

MR. HACKBARTH: David, could I just make sure I understand the beneficiary weighting? So this graph says that 60 percent of beneficiaries live in states with per capita expenditures between \$4,500 and \$6,000?

MR. GLASS: That's exactly right.

DR. REISCHAUER: Can we use the term per beneficiary rather than per capita? Capita is really the number of people living in

a state, right?

MR. GLASS: Okay.

DR. REISCHAUER: You use both terms here and it strikes me as an unnecessary confusion.

MR. GLASS: We don't want that.

DR. NEWHOUSE: When I look at the bars it looks like it's more than 60.

MR. GLASS: There's two above 20 and one at 20. Yes, it's around 60, 63 or something like that.

So we look at this and then we start to adjust for known factors so we can get down to, is there really much variation underlying this or is it just cost and health status and other things that we know about.

MS. ROSENBLATT: Can I just ask another clarifying question, talking about numerator and denominator? If the beneficiary lives in a state, that beneficiary is in the denominator.

MR. GLASS: Right.

MS. ROSENBLATT: But if the beneficiary who lives in Maryland gets service in D.C., what's happening to the numerator?

MR. GLASS: These are all the expenditures on behalf of the beneficiary. So in that case it would go back to Maryland because that's where the beneficiary lives. That's why we wanted to use this measure.

MS. ROSENBLATT: I thought I read that but what you said before didn't sound like that. So it's all mapped back to the beneficiary.

MR. GLASS: Back to where the beneficiary lives, right. To the state of residence of the beneficiary. That's why we in fact wanted to use this one.

So the first thing we adjust for is input prices. Essentially you can do this by making them all equal to one. When you do it you end up with 75 percent of the distribution now showing up in those three central bars. You can see that the whole distribution is pulling in and getting taller. So a lot of the variation that people are worried about to being with is simply that we pay different amounts in different areas because input prices are different, which seems reasonable.

MS. BURKE: Can I just, following up on Alice's point. One of the things that confused me about this, not the definition of how the numbers work, but the fundamental question. If you are tracking the patient back to their state, so essentially you're accounting in the state for the expenditure, the practice pattern is not that state's practice pattern. It's a pattern that exists in the state in which they were services.

MR. GLASS: Right, or the area --

MS. BURKE: So that you're distribution in fact isn't a reflection of what's occurring in those states. It's occurring only to the extent that someone lives there but they are going -- it happens only in those cases where people really travel across boundaries.

MR. GLASS: Yes. But that's not uncommon thought. So when we get down to talking about practice pattern you'll note that we start saying, you probably don't want to look at the state level any more.

MS. BURKE: Right, you want to look at a county.  
MR. GLASS: Right, or a market.  
MS. BURKE: But the bigger point is you're bringing people back to where they live rather than where they're served.  
MR. GLASS: Right.  
MS. BURKE: Which may be a fundamental problem.  
MR. GLASS: No, I don't think it's a fundamental problem, because I think that's what you want to do.  
MS. BURKE: Sure, it is.  
MR. GLASS: If the question you're trying to answer is, are beneficiaries in my state getting the short end of the stick here, I think is what you want to talk about.  
MS. BURKE: Except that your beneficiary in your state may be serviced at the Mayo Clinic.  
MR. GLASS: That's fine. That's why we're tracing it back to the state where the beneficiary lives.  
MS. BURKE: So it's not a question of the practice there. It's a question of the practice where they're serviced.  
MR. GLASS: If the question you're answering is, are the beneficiaries in my state getting shortchanged, you want to know how much is spent on them, regardless of where they get it.  
MS. BURKE: But when you begin to try and understand why the practice patterns are different, that's not a function of where they live. It's a function of where they're cared for.  
MR. GLASS: That's right.  
MR. HACKBARTH: And that point the state really doesn't become an appropriate unit of analysis.  
MS. BURKE: Right, or even the county.  
MR. HACKBARTH: Or even the county, right.  
MS. BURKE: It's not about where they live.  
DR. REISCHAUER: Not to interrupt the smooth flow of your presentation further, but the price adjustment is the one for the place the service is delivered? So I live in western Maryland but come into the District of Columbia for half of my stuff and half of my stuff I get in western Maryland. Do you weight the individual elements or deflate the individual elements --  
MR. GLASS: I'll get back to you on that.  
DR. REISCHAUER: I think it's impossible to do is what I'm thinking.  
MR. GLASS: I'll ask. I don't remember which one we did.  
DR. ROWE: David, does this include GME?  
MR. GLASS: GME is in those bars as they're sitting there now. We later take it out.  
DR. ROWE: But this includes it still.  
MR. GLASS: Yes, it's still there.  
DR. ROWE: Because that's one of the major sources of variation, or a source of variation, right?  
MR. GLASS: Yes. We'll get to that in a minute.  
MR. HACKBARTH: In that spirit that we'll get to that, why don't we go ahead and let David present. I know that I was one who started this. I acknowledge and accept full responsibility.  
MR. GLASS: So if you take out input prices, clearly you change the shape of this and in the way that one would expect. We then adjusted for health status. We did that by looking

at the HCC, hierarchical condition category risk adjustment scores and we adjusted by that. We're trying to get to the quantity of care beneficiaries use eventually. We've also adjusted in here for Part A and B participation rates, which is a very small effect but just different states have different mixes of people who are Part A only and Part B only.

So after those adjustments you can see how the three central bars represent about 90 percent of the distribution as opposed to about only 60 percent when we started, and the standard deviation has dropped to 480 from 740. So you can see that just adjusting for these things that seem very reasonable to adjust for gets rid of a lot of the variation and presumably a lot of the concern that people have that their beneficiaries in their state are getting incredibly shortchanged. There are still some outliers in this distribution but most of it has moved towards a central tendency.

You can see the effect. The black bars are where we started, the gold bars are where we ended up. Any payment system that didn't account for input prices you'd kind of wonder about that. And if expenditures didn't vary by health status you'd find that pretty unusual too. So this is not an unexpected result, but we're trying to show that it's important to look at these things and adjust for them before you start arguing about, our your beneficiaries getting shortchanged or not.

So the question is, is the remaining variation a source of concern? Are areas with more use getting higher quality and those with less use being punished? We want to try to look at the question at some level at least. So when we do that we also now adjust for GME, DSH, and IME, which doesn't make the bars look all that different. It moves states up and down. It changes the state's position around but leaves the distribution unchanged. That's a subtlety about what order you do things in to say, how big is the contribution of this or that. We'll get into that in the paper when we write it, but from here on out we've also adjusted for IME, GME, and DSH.

Now this doesn't show up on the overhead too well but I hope you can see it on yours. What this is is a picture where we've gone to an ordinal measure. We ranked the states on the bottom in ascending of adjusted service use per beneficiary. We're calling it adjusted service use because essentially we've taken the payment side of it out. So the states that are at one is the lowest use, and state out at 51, at that end, is the highest use. What we've plotted it against is a measure of high and low quality, also ordinal, that was used in a JAMA article fairly recently. It's based on how frequently Medicare patients receive 24 preventive measures or treatment methods that have strong indications of improving outcomes. So it's a measure of quality that others have use.

What jumps out at you is that many of the states with low adjusted service use, over near the origin there, have relatively high quality, and many of the states with high adjusted service use have relatively low quality. We put a trend line in there to help visualize that. So if the concern was that low-use states have low-quality care, they're not getting their fair share, the

beneficiary is being shortchanged and not getting high-quality care, that concern isn't supported by the data, as we see it.

DR. ROWE: There's not a typology here. The quality measure does not have imbedded in it some measure of utilization or volume.

MR. GLASS: No, it's just a percent of patients getting aspirin within 24 hours after an MI, that sort of thing. It's that percent of people getting beta-blockers or a percent getting certain vaccinations and that sort of thing.

DR. REISCHAUER: But some of it is mammography or screening and things that in fact back Medicare pays for. You just listed a series of which Medicare doesn't pay for but some of them Medicare pays as well. So it is in utilization.

DR. ROWE: But it would work in the opposite direction.

DR. REISCHAUER: That's what I'm saying.

DR. ROWE: Because the more flu shots and mammograms you do, the higher volume it would be, and that would make this relationship even steeper.

DR. REISCHAUER: Stronger. It's a stronger story.

DR. ROWE: I'm not trying to see whether it would be stronger or weaker, I just want to understand if there is a volume piece in here. We may want to correct for that at some point if it's important.

MR. GLASS: We're not trying to quantify things too much here. That's why we're doing things ordinarily. Anyway, we found this an interesting fighting.

We'd also point out that if one tried to equalize payments to states by, for example, just simply upping the use in lower-user areas by overpaying or something like that you'd run into, in addition to all the other problems with that you'd run into the problem of the beneficiary liability would go up. Again here we've plotted the relationship between state's service use on the bottom and beneficiary liability of the left, on the Y axis. Again, pretty clearly, if you do a lot of use your beneficiary liability tends to go up.

So if you were to just try to bring up the lower-use states for some reason, your beneficiaries might not like it all that much because their liability would go up as well. And when that went up probably Medigap in that area would go up, and employers up, and all that sort of stuff. And it's doubtful that increasing use in the lower-use states would improve quality, as we saw from the previous slide.

So what we've been talking about so far is state level use. The only point of this graph is to say that even if variation by state were eliminated you'd still have variation at other levels. For example, this is county per capita service use, unweighted in this case, in Iowa, which people often think of as a fairly low-use state. The point is that use here varies by a factor of two between the high and low-use counties. So even eliminating variation at state levels probably wouldn't eliminate variation per capita at the county level or any other level you want to calculate it at.

DR. REISCHAUER: Do you have any ability to do this for more than a one-year period? Because once suspects that the --

MR. GLASS: These would jump up and down.

DR. REISCHAUER: -- the outliers are small counties and you have one heart transplant and it --

MR. GLASS: Yes, we could do it for that. Since our point here is just to show that it varies it doesn't make -- but, yes, one would think that that would smooth it a little bit. I think actually we tried it and it didn't make too much of a difference. Counties might change positions but it didn't do too much.

Now what this also drives us to is to remember that beneficiary characteristics and provider practice patterns are predominantly local phenomenon, as you pointed out. Others have investigated at the market level, Wennberg and company have done that, and they've showed that supply of physicians and hospitals make a difference, and other things make a difference. So in your paper we started to do that a little bit. We have a few preliminary results but we're not going to go into them this month. We're going to try to develop those a little more for next month.

So what's our preliminary conclusions? The first is this measure of Medicare payment that has often been cited as misleading for analyzing variation in Medicare spending and obviously they should use our measure instead. Most variation is caused by differences in the cost of inputs and differences in use arising from differences in health status; not a surprising finding. And the remaining variation could be caused by differences in practice patterns, difference in beneficiaries' characteristics and that sort of thing. Those have to be probably investigated at a lower level rather than the state level.

I think one of the more interesting conclusions so far is that higher quality doesn't seem to follow from higher use. Equalizing state payments by increasing use would increase beneficiaries' costs sharing in low-use states; not surprising. And the causes of remaining variation -- what are we going to do about the variation remaining after we've done all the adjustments we have? We don't think you can look at those at the state level very well and we're going to have to -- if we need to look at those we're going to do it at a lower level. In the paper we use something called the hospital market areas and there are about 360 of them or something.

DR. ROWE: David, are you correcting for age?

MR. GLASS: Yes, I think so. When we do all the risk adjustment for health status that's in there.

DR. ROWE: For health status, that includes an age adjustment.

MR. GLASS: Yes, we've rolled that in there I think.

MR. SMITH: David, does the beneficiary characteristics include Medigap, employer wraparound? Is it possible that some of the service use is connected with the availability of supplemental insurance and the distribution of that across --

MR. GLASS: It probably is. I don't know whether we'll be able to get at it because it's a question of how do you find out what supplemental insurance people have in smaller areas. I think that's a little hard to do because of the data sources

available on it. But I think Scott may be talking -- Scott is going to talk about supplemental coverage and how that varies in a little bit.

MS. BURKE: I wondered where in the calculus one assumes the mix of services offered by a provider and what impact that might have. For example, we know the adjustments for teaching hospitals; they're quite explicit. But for example, the presence of an ER, the presence of research activities, that may or may not get picked up in the context of teaching. The presence of a psych unit. There was a particular mention of home health and long-term care and whether those were operative activities in the hospital. But I wondered whether or not there were other aspects of service by their nature that lead to greater utilization. I didn't see that mentioned. I just wondered if that was picked up through acuity or there was some other way of picking that up, or whether it had an impact.

MR. GLASS: I don't think we have any way of picking that up. We think it may be an issue like the presence, are there long-term care hospitals in the area or not. Interesting question. We haven't delved into it yet.

MS. BURKE: But specific to the hospital. Hospitals that have ERs get a certain kind of admission. You're likely to see certain kinds of behaviors. The presence of those kinds of services in an area are likely to lead to a certain level of acuity and a certain delivery of service.

MR. GLASS: But that would be a very small area you're talking about and we certainly aren't going to drop to that -- I think even Wennberg and those guys look at hospital referral regions which at least have one large tertiary care hospital that does certain kind of things and usually include a whole number of hospitals in the hospital referral region. So I don't think anyone drops down to the single hospital level that I know of.

DR. NEWHOUSE: Let me compliment you particularly on the quality graph. I think that will add something. I was going to try to make Bob Reischauer's point somewhat differently. Some of the variation you observe even at the state level is random. What you're interested in is how much of this variation in some sense is systematic. One way to get at that is the way he suggested, which is to average several year, which is in fact how we do the AAPCC at the county level, and see how much variation remains, or how much you take down the variation when you average in more years. Because use of a year is really an arbitrary period. So you might want to consider that as a subsequent thing to do.

MR. GLASS: We'll do that.

DR. WAKEFIELD: Actually David asked one of the two questions that I had. David, I just want to say, I think you did a great adequate starting to help clarify some of the issues around variation so thanks so much for this work. How it gets used remains to be seen but it's a really nice start in terms of teasing apart some of these pieces. I think it's also a nice piece to accompany the information behind Tab D that we'll be discussing in a bit, because there too we get some good clarity brought to some of these issues.

The one question I've got for you is -- it's more of a comment. On the sources of variation in cost, specifically input prices -- this is a little bit of a second order item but I'm wondering if we might, when this gets written up, include a nod to the variation that we know is not quite on point all the time in terms of accuracy or fairness of some of the inputs like wage index payment without getting into the details. But saying that these are the mechanisms for payment. We know that within them they are not in all cases accurately capturing cost, accurately reflecting cost on the provider side in terms of accuracy of payments. Do you follow what I'm suggesting?

MR. GLASS: Yes, I think Julian actually will be getting into some of that, how we might actually go about quantifying some of that.

DR. WAKEFIELD: It's more just if we could reflect that we know already from work we've done previously that there is some discrepancy in the accuracy of those adjustments.

MR. GLASS: From work we've done previously I don't think that was all that --

DR. WAKEFIELD: The wage index, for example.

MR. GLASS: I thought that generally supported it.

DR. WAKEFIELD: Yes, so I'm saying, could we reflect that here when this is written.

MR. HACKBARTH: The problems with the wage index I think tend to be more hospital-specific problems. For example, the hospital that's close to a boundary and ends up with a wage index that arguably is much lower than they ought to give, given their labor market area. But the analysis that we've done looking at the wage index overall would seem to indicate that it's actually a pretty good proxy. For example, it correlates very highly with the cost of living differences across the country. So in this case we're stepping back and looking at the big picture as opposed to the very legitimate hospital-specific issues that sometimes come up with regard to the wage index. But in the aggregate it's actually pretty good.

DR. WAKEFIELD: I take your point and maybe then -- obviously what you're suggesting, Glenn, is to not necessarily go there. I guess my concern when I read this was, the takeaway that somebody could have reading this, assuming that we've got the payment policies just right. And was there the possibility that that could be contributing to some of the variation, if you don't have those payment policies just right. But you think that's too far a step removed from this discussion though. MR. HACKBARTH: No, I think it might well be worth it to make this distinction clear. Here we're talking about aggregate analysis. That does not mean that there are not legitimate hospital-specific issues about payment fairness. It's just not the question that we're answering here.

MS. BURKE: I wanted to just follow up just to ask a further clarification. To what extent will these indicators pick up the -- and it may be through the wage index-- pick up the difference in staffing patterns and how much of a contributor? For example, the use of RNs as compared to LPNs, which is a substantial difference in cost that's incurred by a hospital, and that varies

around the country in terms of the availability, the choice of how one staffs up. To what extent and how is that picked up, or is it, or does it need to be?

MR. GLASS: It's not picked up at all in the data we have.

DR. NEWHOUSE: It's just the DRG payment.

MS. BURKE: Yes, but I'm not sure that the DRG payment fully picks it up either.

DR. REISCHAUER: It's the average.

MS. BURKE: Right, it's the average. But if part of this exercise is to understand some of the variables that exist that lead to differences --

MR. ASHBY: [off microphone] Could I clarify that point? As the wage index is constructed today it would, unfortunately, be picking up the exact factor that you're talking about.

MS. BURKE: Because you'll have a higher input price for --

MR. ASHBY: Yes, because it will be registered as a higher input price. We have long said that the wage index should neutralize that factor and that's what we refer to as occupation mix. So when the wage index is fixed along those lines, one would think it would contribute to a further narrowing of the geographic variation, because in fact occupation mix is raising the values in large urban areas in states like New York, Massachusetts, and the like, and it is tending to do the reverse in some of the smaller, sparsely populated states.

DR. NELSON: I join the others in complimenting you, David. This is very well done.

In the text you touch on capacity as a factor with reference to physician population ratios being a variable that influences expenditure. I'd like to push that a little further. If we begin with the hypothesis that one of the major factors is capacity, both on the hospital side as well as on the physician side, do the curves look the same for Part A as Part B? Do Part A expenditures to some degree parallel Part B? Do they go together or are they incongruent? Is the curve either wider or tighter?

If it would be possible to examine that further I think that would be interesting to see.

MR. GLASS: We can look at that.

MS. ROSENBLATT: I want to add to the list of people complimenting the chapter and I particularly liked the chart on quality versus dollars.

One way of dealing with the effect of the large claim that Bob mentioned would be to truncate any individual's claim as well as running multi-year. You could also see what a truncation does. What this opens up in my mind is the AAPCC county rates. It might be interesting for us to try to blend that into that chapter. We're answering one question but it certainly leads to that question.

I should know the answer to this but maybe somebody can help me. The ratio that we're talking about being misleading, is that the starting point for the county rate calculation or did they map it back to the beneficiary as well?

MR. GLASS: No, the AAPCC starts with the same number that we started with here, the fee-for-service by county.

MS. ROSENBLATT: So it is mapped back to the beneficiary.

MR. GLASS: Yes. That's in fact where we get this from, the same database.

MS. ROSENBLATT: But it still leads to the question of, is the AAPCC starting point, which is the county fee-for-service rate, an appropriate starting point?

MR. GLASS: The objections we've had to that in the past are small areas bouncing around, which is why we're looking at the state level. That isn't an issue I don't think.

MS. ROSENBLATT: But I guess the point I'm trying to make is if there's a lot of unexplained variation then does it make sense for that to be the starting point? That's a question.

MR. GLASS: For M+C? I think that goes back to our usual discussion over it seems to be small an area in some places, too big in others. You'd like to approximate market areas more reasonably.

MS. ROSENBLATT: I'm just suggesting that maybe that should be added to this chapter.

MR. GLASS: Yes, I guess we could.

DR. REISCHAUER: Let me add my compliments to you and to Dan, who I know can't be here. I think this is really an excellent piece of work. I had one question which was just a clarification and then a comment, which I'm not sure I agree with but I think it's worth exploring.

My question for clarification is, you've made adjustments for what you call Part A and Part B participation rates and I wasn't quite sure what that really meant. It's really the ratio of people who have A but not B. It's not the individual rates of each which --

MR. GLASS: No. Some people have Part A -- in some states a different proportion of people have Part A only, and others one will have Part B only, and we just adjust -- it makes almost no difference at all. It just seemed the right thing to do.

By the way, I was told that the fee-for-service numbers we're using we think are -- are apparently three-year averages as they are.

DR. REISCHAUER: The second comment that I want to make has to do with the quality versus service use chart which is sort of the bombshell chart. At one extreme you could say, the more services you provide, the worst quality is. That would be a stretch but it would be a good headline.

I'm thinking as an economist, factors of production are paid less in some places than others. Somebody might argue that they're less efficient. They're seemingly the same factors but they really aren't. Maybe you should run the same chart not adjusting for price differences.

DR. ROWE: Can you explain that again, Bob?

DR. REISCHAUER: Factors of production can be paid differently because the market is different, or in local area cost of living is different, or whatever. Or in fact they are less efficient. We call an hour of labor the same, but it really isn't. The skill level is different, et cetera. It would be interesting -- but we're making an adjustment for these price differences and the price differences -- and maybe we shouldn't

when we're looking at the quality.

So take extreme example, it takes four visits -- I don't want to use a state here or I'll get a lot of hate mail. It takes four visits to a doctor in Mars to get the same results as one visit in Pluto. And the doctors on Mars have a wage rate that's one-quarter what the doctors on Pluto have. Would we care?

DR. ROWE: I guess what I was trying to understand is whether your correction -- the total cost corrected for all the inputs and everything else are a function of the kind of unit costs and the volume. So we have total costs and an axis, or something like that, and then quality on the ordinate, or vice versa. It would seem to me -- what I was trying to do was get to an analysis that didn't have the unit cost in it and just had the volume and looked at the relationship of volume to quality. But it sound like -- that's why I was asking you whether that's where you were going. Is that another way to say what you were doing?

MR. GLASS: That's essentially what we have.

DR. REISCHAUER: That's what we have. But what I'm saying is, what if you spend \$100 on Pluto and \$100 on Mars, what's the quality outcome in those two situations?

MR. GLASS: We can certainly run it that way and see what it looks like. We'll leave it to you to interpret it.

MR. HACKBARTH: David, the graph that's labeled beneficiary weighted state level per capita expenditures adjusted for input prices, the fifth one in the packet, is that just input prices or is that all of the policy adjustments like teaching adjustments and the like?

MR. GLASS: No, that is simply input prices. We did the other ones later. We didn't show it in this one.

MR. HACKBARTH: They weren't in this packet.

MR. GLASS: Again, it turns out if you do it at the end of the process -- we did it at the end of the process because those include not just cost factors but also the policies such as -- like the IME over --

MR. HACKBARTH: In fact that might be one way to characterize that there is some --

MR. GLASS: That's why we did it last.

MR. HACKBARTH: A certain amount of the variation is by design. It's the result of conscious policy. We can argue whether it's good policy or bad policy, but it's fully an intended variation. Then there's a residual that is not explained by that.

One take on this is, for some people unless you read it very carefully, might be that the variation isn't as big as it seems at first glance. For people who aren't reading carefully they may see that as being at odds with Jack Wennberg's work which emphasizes how big the variation is and how important it is. I don't see this work as being at all inconsistent with Wennberg's. We're just talking about difference pieces of the puzzle. I think it will be very important to present that clearly so that there's no confusion about it.

MR. GLASS: We'll try to do that. All that we've done at the beginning here they've already adjusted for before they start

talking about variation.

MR. HACKBARTH: Basically Wennberg is talking about the residual.

MR. GLASS: Right. And we're trying talk about --

MR. HACKBARTH: The other stuff.

MR. GLASS: The simpler stuff first.

MR. DURENBERGER: I'm assuming that this product is going into a June market to be read on the Hill and places like that because the issue of state-by-state equity has been raised, and I'm probably the first guy that raised it, at least the first member that raised it. Sheila knows that and I spent a lot of time with this sort of thing.

I watched the evolution of the Medicare Justice Coalition, the fight over pay equity. Then I watched the congressman last year who ran his campaign on this. So I'm looking at when I'm reading this, I'm trying to pretend what impact is that going to have on that same congressman or on Chuck Grassley, the chairman of the Finance Committee or something like that.

I sort of come to the conclusion that explaining the difference between what Jack Wennberg has been doing for 35 years and this is a subtlety that's going to get totally cost on a whole lot of people unless it is somehow repositioned. I'm trying to struggle with how best to reposition it so you can get maximum value from the research, which is very good, but also maximum impression that there's more to this issue of how they pay in Medicare than just 1,099 in Banner, Nebraska versus 9,000-something in St. Charles County, Louisiana, or my favorite, Miami and Minneapolis.

The point is there is more to it than that. So when I think about how to position the issue initially, how to create why we're doing this, it's not so much a response to the state-by-state equity as it would be a legitimate question that we should raise, as all payers should raise, as to whether or not things like overuse, underuse, misuse, and so forth are in some way facilitated by the payment system. And then what is it about the payment system that causes overuse. And then the research says, overuse does not improve quality. I think this is what this one tentatively says. Jack's will say, overuse areas or overexpenditure areas actually have worse access. There's some tentative conclusions we could come to if we're thinking about this as public policy.

But the point is, what role is the payment system playing in achieving the result we want or the result we don't want? Then I would guess that would lead us to a research agenda which says, okay, if you want to change this, don't do what Durenberger foisted on you and his crowd in the mid-'90s which was the floor, and Mary Wakefield and others. We said, let's just raise the floor, and now they're raising floors and things like that. It would lead you then to some form of a research agenda that would say, if they want the spending system or the payment system to achieve these particular ends, then we need do the following.

I told Joe I read with interest the piece that the Harvard group had in the latest issue of Health Affairs which is a long research agenda. It looks like to the year 2010, something like

that, to get to the answer.

DR. NEWHOUSE: You can up the AHRQ budget and get it done faster.

MR. DURENBERGER: My point simply being, we're really dealing in such a simplistic environment where if you look at the stuff on -- and we've been perpetuating this. You look on its face, it looks like inequity. Just to say, it's not the inequity that you think it is I don't think helps as much as if you give them another reason that they ought to invest in a process of finding out what is the best solution to the problem for Iowa or whatever the case may be. So it's just kind of like, how do we set it up? I'm not arguing against what's in here as much as, or as well as the rest of you did, but how do we set this up for its presentation in June?

MR. HACKBARTH: In several different places in the papers for this meeting this issue comes up, that the relationship between quality and cost, or quality and utilization may not be what people suspect; that more is better. The one chapter where we delve more specifically into the policy responses is in the discussion of incentives for quality. As you'll recall there's discussion there are about how to reward providers who are providing high quality while using fewer resources. Not that that's the end of the conversation by any stretch, but this is an important theme as I see it of various chapters in the June report.

We're running out of time here. We've got a few more people. Carol, Nancy-Ann, Joe, and then Mark.

MS. RAPHAEL: I was just wondering if we knew anything at all about the percentage of dually eligible in the states, because to some extent I find that a proxy for high utilization. I don't know if that's true throughout the nation but I'd be interested if we had any information on that.

MR. GLASS: I'm sure we have data on it. We haven't put it in here. I don't think we've tested that as an explanatory variable.

MS. RAPHAEL: There is something in the Medigap chapter.

MR. GLASS: Right. But there is data.

MS. RAPHAEL: Then the other observation I would have is, Americans love rankings and here we're ranking states. Are they going to would remain anonymous in our report? Because I can really seen a request by states to where do I rank in all of this, and which is the number one state, and which is the 50th state. How do we plan to handle that?

MR. GLASS: Mark, you can answer that one.

MR. HACKBARTH: As I've recall the Steve Jenks piece listed states so the quality rankings are public and certainly the cost rankings are no secret either. Personally, I don't think any of this is confidential in any way so I think we ought to include it myself.

DR. MILLER: Yes, I think you've put your finger on a dilemma that comes up in all of this. We felt that this question was really important to investigate because people are talking about it, but I fear the notion that people will ask, cut it this way, cut it that way, cut it this way. At some level there may

be something to publishing things in the report and saying, we looked at this information. I fear the second wave that comes behind it and has the staff just churning through thing multiple different directions. That I am going to try and hold the line on.

But the dilemma was to answer this question at all, it just seemed so much is being talked about on the Hill that to leave it alone entirely also was a problem. So it's a dilemma.

DR. REISCHAUER: I think it gives a very misleading impression to actually put the states' names in here because these are rank ranks and you could have 30 states that are imperceptibly different from one another but because of the way you do the axis on a ranking it makes it look like something is going on that maybe isn't really there.

MS. DePARLE: CMS uses quartiles for that reason.

MR. HACKBARTH: If I were to do it I would actually put an appendix that has the raw data by state as opposed to just the ordinal ranking. I agree with your point on that.

We need to bring this to a conclusion. I want to give a couple people who haven't had a chance to say anything an opportunity.

MS. DePARLE: I will be very quick. I thought this analysis was terrific and it really moves the debate forward on these issues. Just focusing back on the charts and the analysis about the relationship between states service use and quality of care, I realized I wasn't clear after reading this and maybe it should be clear about whether -- are we talking about states beneficiary service use or are we talking about spending? At some point you say spending.

MR. GLASS: It's what we call adjusted service use, and we think we've taken a lot of the spending factors out of it.

MS. DePARLE: So it really is mostly service use.

MR. GLASS: Yes, we're trying to get it down to service use.

MS. DePARLE: Can we say anything about what services we're talking about? Can we say anything more about --

MR. GLASS: We could probably say something about Part A and Part B.

MS. DePARLE: Because that might be interesting, if we were able to characterize those quality indicators that CMS came up with, about where they would fall. And to get to Dave Durenberger's question, something like the beta-blockers that's captured in the DRG somewhere. Just in drilling down to see whether the payment system can somehow in some way facilitate or encourage one type of utilization versus another. I don't know whether it's possible to look at that.

MR. GLASS: We're not going to be able to get to that I don't think. And whether the payment system could even be expected to solve all these things --

MS. DePARLE: No, but I think it's interesting to think about, so I just wondered how much data we had on that.

MR. SMITH: I'll try to be brief. David, I'd belatedly join others in saying I found this both informative and provocative, so in that sense it was a terrific piece of work and I appreciate it.

Dave Durenberger's question seems to me raises the question of how to -- he raised the framing question. One way to read this draft is it vindicates the payment system. Saying that we don't have problems with the payment system isn't going to work in this environment. But it may be that the way to frame this is the focus on the unexplained residual, really to try to vindicate the payment system. We've got practice patterns and we've got beneficiary characteristics. We talk about those later when we talk about Medigap, when we would talk about dual eligibles that Carol raised.

But instead of writing the chapter to make the variation go away, to write the chapter so that we focus on where the sources of variation really are, and you do that it seems to for me at the end when you raise practice patterns and beneficiary characteristics and we ought to say more about that.

But actually I wanted to add a third item, which is the question that Sheila raised a little bit earlier, is there a Say's law, a build it and they will come phenomenon here as well?

Is there something on the supply side which is an important piece of understanding utilization variations? I don't know that we have the data to get at that, but it seems unlikely, and particularly when you read this back to back with the physician service utilization draft, there's a subtext there that suggests, and Wennberg's stuff suggests that there's something about the supply side which is important to understand. To the extent we can I think it would be useful to add that as an at least worth exploring piece of an explanation of the residual.

MR. GLASS: We might be able to show a correlation but we couldn't show a causative -- they build it and they came or was everyone wanted to come there so --

MR. SMITH: I understand. I think taking note of it would enrich the mix in a useful way here. I understand that we don't understand chickens and eggs.

DR. NEWHOUSE: I actually want to speak against that for just that reason. That is, for all we know more doctors or higher priced specialist doctors are in areas where people are sicker. Therefore, we don't -- it really is the case that we don't know how to attribute this variation.

So I would have us try to stop with the beneficiary characteristics and -- because I just don't think one can interpret -- the problem is, if you do this it will invite the interpretation that what we need to do is reduce the supply in the high rate areas or boost it in the low rate areas and we don't really know.

MR. SMITH: I think we don't know, Joe, but I don't think we can produce this collection taken in its sum and not say this question bubbles up. Now we may want to do that in a way which expresses a great deal of caution, as you appropriately raise but I don't, at least I couldn't as I tried to read this stuff on a plane over the weekend, I could not put away -- the missing explanatory variable here is the supply side of the equation and at least we ought to say that, even if we can't say much about it.

DR. NEWHOUSE: I think they can certainly raise the issue of

what to attribute the residual variation to, but I read this as, of the gross variation how much can we explain with these factors. The framing issue is really, is the glass have empty or half full, having come to that point. I guess we'll leave to -- in terms of further analysis I would not want us to go down that road I think because I don't we have anything to say when we get to the end of it about what to do.

MR. SMITH: I don't think I know enough, but I'd be interested in knowing whether the road ought to be traveled.

DR. NEWHOUSE: One small note. I do think we need to be very clear about what time period we have because the slides and the figures in our book say 2000 and now you're saying three-year average.

MR. GLASS: We'll clarify that.

MR. HACKBARTH: Okay, we need to move on.

Thank you, David. Good work.